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10/043,325	01/14/2002	Young-Won Song	HI-0070	6678

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EXAMINER	
BHATIA, AJAY M	

ART UNIT	PAPER NUMBER
2145	

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/043,325	SONG ET AL.	
	Examiner	Art Unit	
	Ajay M. Bhatia	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *01 July 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Arguments

Applicant's arguments filed 6/27/05 have been fully considered but they are not fully persuasive.

Applicant has submitted a new abstract and specification. Examiner has reviewed specification and it seems to contain no new matter. Abstract looks to be compliant but examiner is unsure of the number of words contained within the abstract and request that it meets the required 50-150 word limitation for abstracts.

In response to applicant amendment to claim to overcome the 101 rejection, the claim as amended still fail to comply with 101 and therefore are still rejected, for further information see the rejection below.

Examiner also fails to see how the amendments to the claims fully overcome the applicants amendments to the claims. It is clear from the claim language that essential features are not fully described omitting essential subject matter that would provide an appropriate interpretation of the claims. Examiner has consider claims in light of the amendments to the best of his abilities.

In response to applicants argument that Vestergaard fails to teach a data structure examiner direct applicant to figure 5, which show multiple level of data structure. But since applicant has failed to provided claims with sufficient subject matter within the claims to define a specified structure examiner still relies upon Vestergaard. Examiner is limited to the limitations that are disclosed in the claims, should applicant wish to include specifically defined structure then the Examiner would be able to

properly address the defined structure, as a currently claimed examiner is limited to the broadest possible interpretation of an object that is not fully defined.

Applicant has request a copy of the provisional application, as of October 2004, the policy of the office supplying provisional application has now changed, applicants are able to retrieve provisional application via pair, and if applicant is unable to make use of the pair program they are able to request a printed copy via public pair.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Applicant has failed to limit the claims tangible embodiments and therefore is non-statutory. Methods claims fail to include any form of apparatus or hardware device to accomplish the intended task.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-22 rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: applicant fails to clear define the relationship between item container and component and there relationship to the digital item, types of components or items do not provided any clear definition to as the content of those types of objects.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 21, and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Vestergaard et al. (U.S. Patent 2002/0146122 referred to a Vestergaard).

For claim 1, Vestergaard teaches, a method of generating a digital item data structure as a unit of manipulation of multimedia data for a system configured for electronic commerce activates, comprising: selecting a resource of multimedia data for electronic

commerce activities; and generating a digital item data structure for the selected resource comprising an anchor for designating the selected resource, a descriptor for describing operational use conditions for the selected resource. (See Vestergaard, paragraphs 129, 147, 132, and 139, since no clear definition of Digital Item is provided in the claim Digital Item is interpreted as a type of data structure as depicted in figure 5)

4. For claim 2, Vestergaard teaches, the method according to claim 1, where in the generating a digital item data structure for the selected resource further comprises selectively generating a murCondition for describing conditions related to commercial management and use rules for the selected resource, an eventReport for describing an event to be reported in connection with the selected resource, a user preference information for the selected resource, or a reservedMetadata for describing metadata additionally required for a future digital item definition model. (See Vestergaard, paragraphs 151-155 and 132)

For claim 21, Vestergaard teaches, a method of generating a digital item data structure as a unit of manipulation of multimedia for a system configured for electronic commerce activities, comprising: selecting a resource of multimedia data for electronic commerce activated; and generating a container data structure, an item data structure, and a component data structure, as format of digital item data structure of the selected resource in order to provide the unit of manipulation for electronic commerce activities according to the following element definitions:

(a)container::=(anchor|container)* (anchor|item)* descriptor* murCondition* eventReport* userPreference* reservedMetadata*

(b)item::=(anchor|item|component)+choice* descriptor* murCondition* eventReport* userPreference* reservedMetadata*

(c)component::=resource anchor descriptor* murCondition* opCondition* eventReport* userPreference* reservedMetadata*

(d) anchor::=reference descriptor* opCondition*

(e) descriptor::=(anchor|descriptor)* (component|statement) opCondition*

(f) choice::=choice* selection+descriptor* opCondition*

(g) selection::=predicate descriptor* opCondition*

(h) eventReport::=anchor descriptor murCondition

(i) userPreference::=anchor descriptor murCondition

(j) reservedMetadata::=anchor descriptor murCondition

(k) murCondition::=predicate+

(l) opCondition::=predicate+

(applicant fails to provide definitions for *, |, or +, therefore examiner used definition provided in light of the specification on page 10 lines 1-5 of application, which disclose the `*` means at least zero(0) or more, `+` means at least one(1) or more, and `|` means `OR` logical operation, hence a * are treaded as zero and a container nothing, a container= (nothing) item = (anchor|item|component)+ and component=resource anchor) (See Vestergaard, paragraphs 129, 147, 132, 139-140, 151-155, and figure 5, component is contained in the base mp3 encrypted content of the MPE file and in paragraphs 139 and 140, item is the audio content with the URL as the anchor as describe in paragraph 147, container can be clear seen in figure 5)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 3-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vestergaard in view of Chouraki et al. (U.S. Patent 5,594,792).

7. For claim 3, Vestergaard teaches, method according to claim 1, wherein the digital item data structure comprises one of a lowest level atomic digital item data structure which is not further divided and a packaged digital item data structure, (See Vestergaard, paragraphs 129, 147, 132, 139, and 151-155)

Vestergaard fails to clearly disclose, wherein the packaged digital item data structure comprises any sub-packaged digital item data structure in a recurrent package form in which atomic digital item data structures are packaged or already packaged digital item data structure are again packaged.

Chouraki teaches, wherein the packaged digital item data structure comprises any sub-packaged digital item data structure in a recurrent package form in which atomic digital item data structures are packaged or already packaged digital item data structure are again packaged. (See Chouraki, Col. 9 lines 25-45)

It would have been obvious to on of ordinary skill in the art at the time of the invention was made to generate the object of Vestergaard's system according to Chouraki's method of creating recursive multilayer objects in order to simplify and

reduce the amount of code used to traverse the structure of the object. (See Chouraki, Col. 9 lines 15-25)

8. For claim 4, Vestergaard-Chouraki teaches, the method according to claim 3, wherein the packaged digital item data structure is defined to include (an anchor) for designating the same level of digital item data structure or (an anchor) for designating a lower level of digital item data structure. (See Vestergaard, paragraphs 147, 139)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 4.

9. For claim 5, Vestergaard-Chouraki teaches, the method according to claim 23, wherein order to construct the recurrent layered data structure, an atomic digital item data structure which is the lowest layer is defined as a component, a packages digital item data structure which is a middle layer and which includes a component or any sub-packaged digital item data structure is defined as an item, and a packaged digital item data structure which is a highest layer and which includes an item or any sub0container is defined as a container. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 5.

10. For claim 6, Vestergaard-Chouraki teaches, the method according to claim 23, where in order to construct the recurrent layered data structure, an atomic digital item data structure which is the lowest layer is defined as a component, a packaged digital item data structure which is a middle layer and which includes the components or any sub-packaged digital item data structure or (an anchor) for designating a lower level of digital item data structure is defined as an item, and a packaged digital item data structure which is the highest layer and which includes an item or any sub-container or (an anchor) for designating a lower level of digital item data structure is defined as a container. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 6.

For claim 7, Vestergaard-Chouraki teaches, a method of generating a digital item data structure as a unit of manipulation of multimedia data for a system configured for electronic commerce activities, comprising: selecting a resource of multimedia data for electronic commerce activities; generating a component data structure defined to includes the selected resource, an anchor for designated the selected resource, a descriptor for describing details of the selected resource, and an opCondition for describing operational use conditions of the selected resource; generating an item data

structure defined to include packaged contents including at least one component data structure or item data structure or anchor for designating the selected resource, a choice for the packaged content, and a descriptor for describing detail of the packaged content; and generating a container data structure defined to include packaged content including at least one item data structure, or container data structure or anchor for designating the selected resource and a descriptor for describing details of the packaged content. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, and 151-155)

11. For claim 8, Vestergaard-Chouraki teaches, the method according to claim 7, wherein generating a component data structure is defined to include selectively generating a murCondition for describing conditions related to management and use rule for the selected resource, an eventReport for describing user preference information on the selected resource, a user Preference for describing user preference information on the selected resource, or a reserved Metadata for design metadata additionally required for a future digital item definition model. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, and 151-155)

12. For claim 9, Vestergaard-Chouraki teaches, the method according to claim 7, wherein generating an item data structure is defined to include selectively generating a

murCondition for describing related to management and use rule for the packaged content, and eventReport for describing an event to be reported in connection with the packaged content, a userPreference for describing user preference information on the packaged content, or a reserved Metadata for describing metadata additionally required for a future digital item definition model. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 9.

13. For claim 10, Vestergaard-Chouraki teaches, the method according to claim 7, wherein generating a container data structure is defined to include selectively generating a murCondition for describing conditions related to management and use rule for the packaged content, an eventReport for describing an event to be reported in connection with the packaged content, a userPreference for describing user preference information on the packaged content, or a reservedMetadata for describing metadata additionally required for a future digital item definition model. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 10.

14. For claim 11, Vestergaard-Chouraki teaches, the method according to claim 7, wherein the choice is defined to include a recurrent form a of at least zero (0) or more choice, at least zero (0) or more descriptor, at least zero (0) or more opCondition that can be used to determine where a single selection is selected or more than one selection is selected, and at least one (1) or more selection as the object of selection. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, 163 and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 11.

15. For claim 12, Vestergaard-Chouraki teaches, the method according to claim 11, wherein the selection is defined to include a predicate which is Boolean function representation language, at least zero (0) or more descriptor for describing the content of the selection, and an opCondition for describing operation use conditions of the selection. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, 163 and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 12.

16. For claim 13, Vestergaard-Chouraki teaches, the method according to claim 7, wherein the choice is used for the item level for the purpose of selective item configuration in order to adapt the digital item data structure according to the various types of networks and terminals, or a user request, and wherein the choice is modeled in a recurrent form. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 45, 129, 147, 132, 139, 163 and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 13.

17. For claim 14, Vestergaard-Chouraki teaches, the method according to claim 7, wherein a descriptor used for all of the digital item data structure choice, selection eventReport, userPreference, reservedMetadata, and anchor is defined to include at least zero (0) or more descriptor or anchor, a component capable or representing the content of the descriptor or a statement of text or any machine readable format for describing the content such as parent elements of the descriptor , and at least zero (0) or more opCondition for describing operational conditions of descriptor. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, 163 and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 14.

18. For claim 15, Vestergaard-Chouraki teaches, the method according to claim 7, wherein the anchor used for all the digital item data structure, eventReport, userPreference, reservedMetadata, and descriptor is defined to include a reference which is an identifier designating a uniquely atomic digital item data structure and for each digital item data structure, at lest zero (0) or more descriptor for describing the anchor, and at least zero (0) or more opCondition for describing a usage format of the anchor. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, 163 and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 15.

19. For claim 16, Vestergaard-Chouraki teaches, the method according to claim 7, wherein the eventReport is defined to include an anchor for designating a server computer for processing, managing, and storing the content of a reportable event report, a descriptor for describing the content of an event report, and murCondition for describing conditions related to management and use rule of an event report content. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, 163 and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 16.

20. For claim 17, Vestergaard-Chouraki teaches, the method according to claim 7, wherein a userPreference is deigned to include an anchor for designating the user preference information, a descriptor for describing the content of the user preference information, and a murCondition capable of describing management and use rule of the user preference information. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 129, 147, 132, 139, 163 and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 17.

21. For claim 18, Vestergaard-Chouraki teaches, the method according to claim 7, wherein the murCondition used for all of the digital item data structure, eventReport, userPreference and reservedMetadata define conditions for management and use rule of a corresponding digital item data structure of definition model elements by use of at least one (1) or more predicate which is Boolean function representation language.. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 47, 48 , 94-100, 129, 147, 132, 139, 163 and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 18.

22. For claim 19, Vestergaard-Chouraki teaches, the method according to claim 7, wherein opCondition used for Digital Item of component level, descriptor, anchor, choice and selection defines operational use conditions for a corresponding item or definition model elements by use of at least one(1) or more predicate which is Boolean function representation language. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 47, 48 , 94-100, 129, 147, 132, 139, 163 and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 19.

23. For claim 20, Vestergaard-Chouraki teaches, the method according to claim 19, wherein the, opCondition describes conditions, including transmission bit rate, resolution of video or image, sampling rate of audio, compression algorithm, key or decoding conditions if coded, and transmission protocol.. (See Chouraki, Col. 9 lines 25-45) and (See Vestergaard, paragraphs 47, 48 , 94-100, 129, 147, 132, 139, 163 and 151-155)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 20.

For claim 23, Vestergaard-Chouraki teaches, the method according to claim 3, wherein the digital item data structure is classified as one of the three levels in a recurrent layered data structure. (See Vestergaard, figure 5)

The same motivation that was utilized in the rejection of claim 3, applies equally as well to claim 23.

24. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vestergaard et al. (U.S. Patent 2002/0146122 referred to a Vestergaard).

25. For claim 22, Vestergaard fails to clearly disclose, the method according to claim 21, wherein `*` means at least zero(0) or more, `+` means at least one(1) or more, and `|` means `OR` logical operation.

It is well known in the art to use, the method according to claim 21, wherein `*` means at least zero(0) or more, `+` means at least one(1) or more, and `|` means `OR` logical operation.

It would have been obvious to on of ordinary skill in the art at the time of the invention was made to use the '*' '+' '\' to represent 0 or more, 1 or more, and the logical operator OR, in order to in order to readily translate the algorithm into a computer program by clearly define objects using stand digital logic practices.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached UPSTO 892 (if appropriate).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay M. Bhatia whose telephone number is (571)-272-3906. The examiner can normally be reached on M-F 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571)272-3880. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AB

RUPAL DHARIA
SUPERVISORY PATENT EXAMINER